



# **“Turning Data Into Information”**

**Business Intelligence and Analytics Center (BIAC)  
Timothy Hinds - Program Manager  
Office of Environmental Information  
US EPA**

**Thursday, December 11, 2008  
Environmental Information Symposium**



# Agenda

- What is BI?
- What Functional Areas Require BI?
- What Does a Typical BI Project Look Like?
- What is the BIAC?
- What BI Products are Available?
- What Services are Available?
- Who is Using BI at the EPA?
- How Can I Learn More?
- Interested in a BI Solution?



# What is BI?

- Business Intelligence (BI) is getting the right data to the right person in the right format at the right time.
- BI is a broad category of applications & technologies that:
  - Gather,
  - Store,
  - Analyze,
  - and provide Access to data
- BI applications enable and equip decision-makers, analysts, and other information workers



# What is BI?

- **Query and Reporting**
  - Reporting
  - Scorecards and dashboards
  - Alerts
  - Collaboration
  - Ad hoc query
- **OLAP (Online Analytical Processing)**
  - Multi-dimensional analysis
  - Integrated drill-down & drill-through
- **Analytics and Modeling**
  - Statistical analysis
  - Data modeling
  - Data mining
  - Advanced visualization
- **ETL**
  - Data integration & cleansing
  - Interoperability
  - Integration
- **Repositories, Warehouses**
  - Data warehouse and data mart construction
  - Metadata repositories

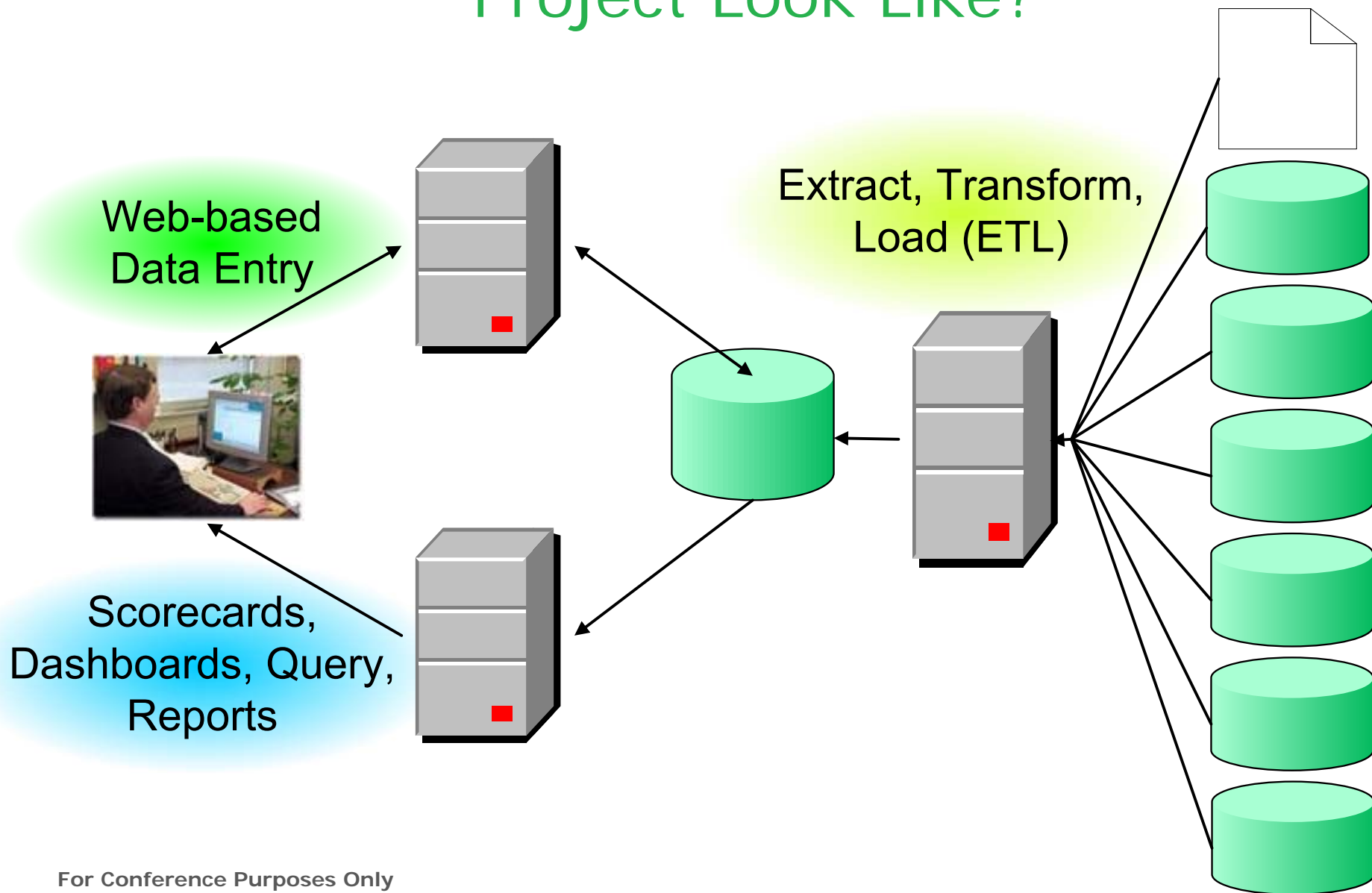


# What Functional Areas Require BI?

- Environmental Data Presentation
- Financial Management
- Decision Support
- Performance Management
- Activity Monitoring
- Forecasts and Projections
- Geospatial Analysis
- Scientific Analysis
- Etc.

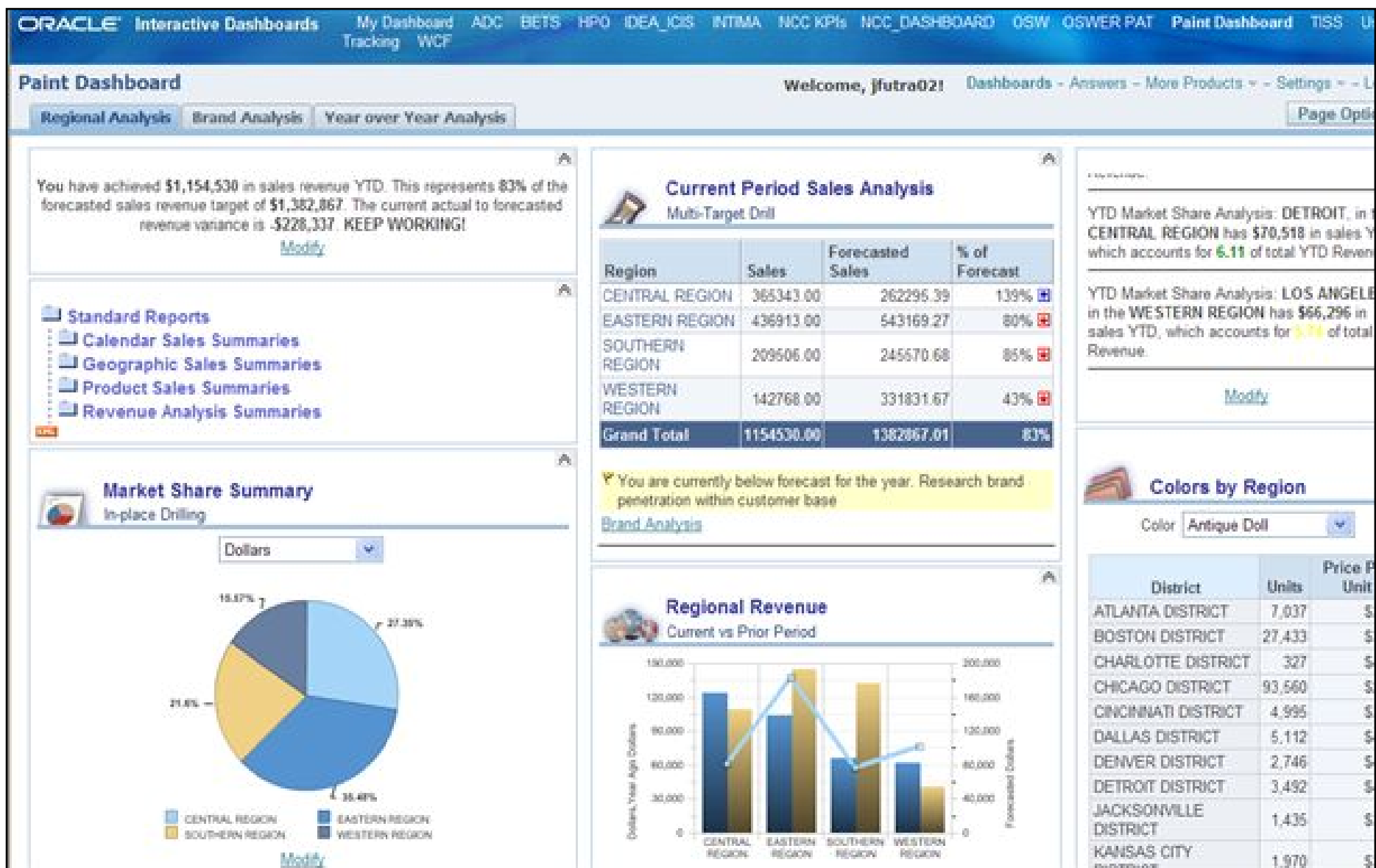


# What Does A Typical BI Project Look Like?



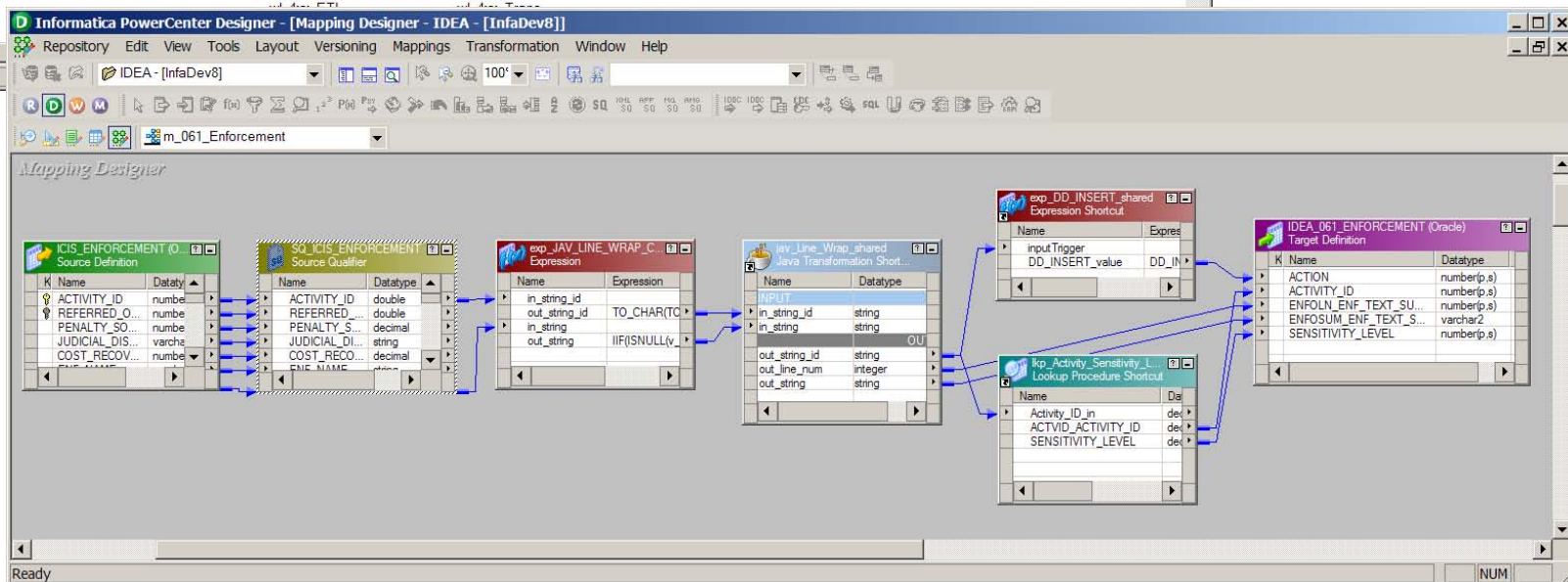
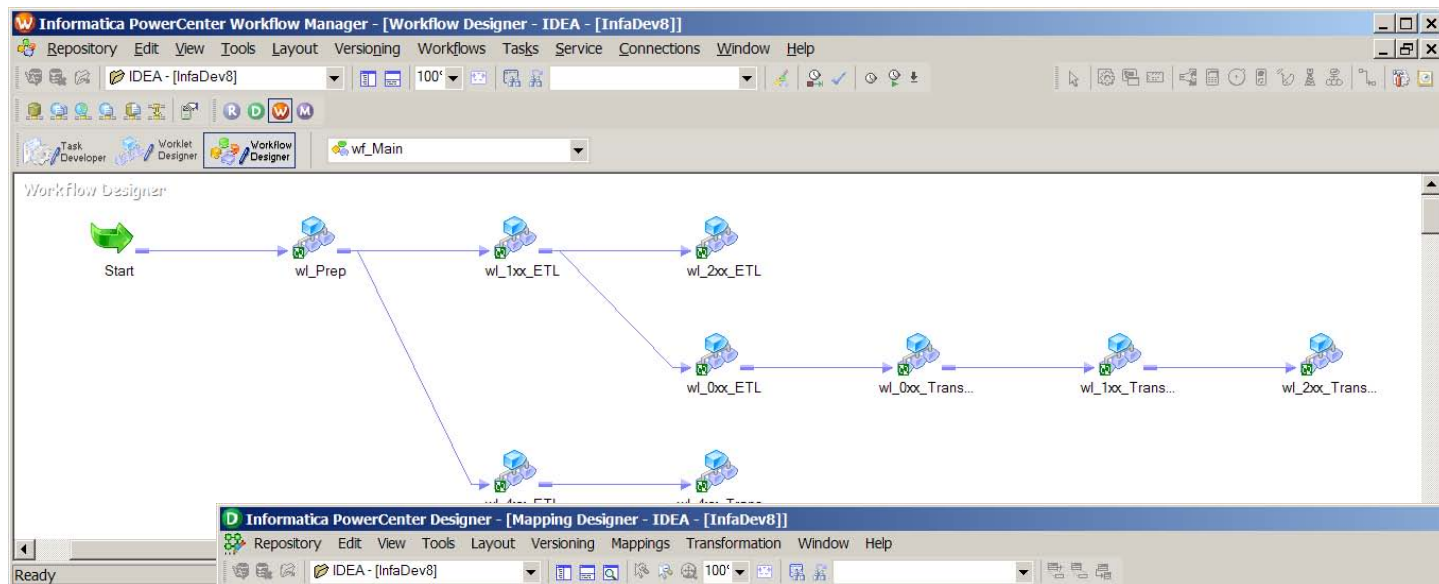


# What Does A Typical BI Project Look Like?





# What Does A Typical BI Project Look Like?







# What is the BIAC?

- The Business Intelligence & Analytics Center (BIAC) was formed to enhance the Agency's analytical & decision-making capabilities by:
  - Providing enterprise leadership and perspective
  - Facilitating the sharing and reuse of knowledge and experience
  - Achieving economies of scale for BI tools and applications
  - Supplying BI solutions, tools, and consulting



# What BI Products Are Available?

- The BIAC offers various BI products:
  - BusinessObjects XI
  - Oracle Business Intelligence Enterprise Edition (OBIEE)
  - Informatica Powercenter
  - SAS
- The BIAC offers centrally shared hosting for:
  - BusinessObjects XI
  - Oracle Business Intelligence Enterprise Edition (OBIEE)
  - Informatica Powercenter



# What Services Are Available?

- The BIAC offers a wide range of services:
  - Hosting & Infrastructure Operations
  - Consulting
  - Training
  - IV&V (Independent Validation and Verification)
  - Application Development Support
  - Application Administration
  - Application Help Desk Support



# What Services Are Available?

- BIAC Centrally Shared Environments consist of development, staging, and production servers
- The Shared Environments are staffed with experienced professionals that develop & administer applications & environments under industry standards
- Advantages of leveraging the BIAC shared resources:
  - Reduction in software & hardware costs
  - Reduction in administration & operational costs
  - Shared & reusable objects



# Who is Using BI at the EPA?

BIAC Product	Major Office Users
Business Objects	OCFO, OECA, OARM, ORD
SAS	Agency-Wide
Informatica	OAR, OARM, OECA, OEI, ORD, OSWER
Oracle Business Intelligence	OARM, OEI, OSWER, OSW



# How Can I Learn More?

- E-mail [bia-request@epa.gov](mailto:bia-request@epa.gov)
- BIAC Website <http://intranet.epa.gov/biac>
  - Disseminate news and information to the BIA community
  - Support a functionally-oriented structure for maintaining and communicating BIA information and pointers to other sites
  - Provide a repository for archival material and published documents
- BIAC QuickPlace <https://epaqpx.rtp.epa.gov/biac>
  - Enables the BIA community to disseminate information among themselves and to BIA special interest groups
  - Supports a dynamic and opportunistic structure whereby anyone with "write" privileges can post
  - Offers self-service forum for asynchronous collaboration (e.g., document sharing without emailing)



# Interested in a BI Solution?

- Working Capital Fund (WCF) Services
  - BI Service
  - Related services for application & database hosting and deployment, consulting, support
- Contract Mechanisms
  - **ITS-BISS**: Requirements, planning, analysis, architectural support studies
  - **ITS-ESE**: Systems engineering and application development services
  - **ITS-EPA**: IT management, operation, and maintenance



# QUESTIONS?

**Please stop by and visit with the  
BIAC Staff at Exhibit Booth #405!**





Contact:

**Timothy Hinds**

Office of Environmental Information

Office of Technology Operations and Planning

National Computer Center

Phone: 919 541 3584

E-mail: [hinds.timothy@epa.gov](mailto:hinds.timothy@epa.gov)

[BIA-Request@epa.gov](mailto:BIA-Request@epa.gov)

Website: <http://intranet.epa.gov/biac>

Visit us at Booth #405